

## **STACKABLE DISPLAY CONTAINER, ITS PREASSEMBLY AND BLANK FOR MAKING SAME**

### **Background of the Invention**

It is known in the packaging art to provide packages of candy or other items in containers, for display to customers in stores. It is also known that such containers can be shipped to the locations of display in knockdown form; i.e., flattened but otherwise being glued, stapled or otherwise secured together, such that they are already substantially preassembled, it generally only being necessary to open the sides and or ends of the containers and to affix the container bottom wall into its assembled condition, such that smaller packages, bags, or the like of candies or other products can be placed into the assembled display container, for ready display.

It is also known in the packaging art that it is sometimes desirable to be able to stack a plurality of such display containers, one on top of the other, so that such containers as may be stacked above the bottom-most container are amply supported and so that a stack of a number of such containers, when filled with packages for display, will not collapse.

It is also known in the art that such containers can be made from blanks that are provided with pre-cut cut lines and pre-scored or pre-formed fold lines.

### **Summary of Invention**

The present is directed to providing a stackable display container for receiving and displaying products therein, wherein upstanding walls of the container are provided with associated spacer panels that together define stacking supports for the container, to support containers carried thereabove, wherein each stacking support is thicker than the combined thickness of an upstanding container wall and its associated spacer panel.

Accordingly, it is a primary object of this invention to provide a stackable display container in which spacer panels are used in connection with upstanding walls, to provide increased thickness of upstanding walls and their associated spacer panels, for stable stacking support for other stacking containers disposed thereon.

It is another object of this invention to provide a novel container preassembly for accomplishing the object set forth above.

It is a further object of this invention to provide a novel container blank for accomplishing the objects set forth above.

Other objects and advantages of the present invention will readily apparent to those skilled in the art from a reading of the following brief descriptions of the drawing figures, the detailed descriptions of the preferred embodiments, and the appended claims.

### **Brief Description of The Drawing Figures**

Fig. 1 is a top perspective view of a container in accordance with this invention, in its assembled condition.

Fig. 2 is a top perspective view of a stack of containers of the Fig. 1 type, arranged in stacked relation.

Fig. 3 is a top plan view of the container of Fig. 1, wherein the center divider is shown in phantom.

Fig. 4 is an enlarged fragmentary perspective view of the attachment of a spacer panel to a rear wall of the container of Fig. 3, taken generally along the line IV-IV of Fig. 3.

Fig. 5 is a view similar to that of Fig. 4, but taken along the line V-V of Fig. 3.

Fig. 6 is a top view of a container preassembly for the container of Fig. 1, shown in its flattened form, and including a front wall, bottom wall and left side wall thereof.

Fig. 7 is a view similar to that of Fig. 6, but of the reverse side of the container preassembly to that shown in Fig. 6.

Fig. 8 is a plan view of a container blank, for making container preassemblies and containers in accordance with this invention.

### **Detailed Descriptions of The Preferred Embodiments**

Referring now to the drawings in detail, reference is first made to Fig. 1, wherein a stackable display container is shown, generally designated by the numeral 10, having an upstanding front wall 11, an upstanding back wall 12 and upstanding right and left end walls 13 and 14, respectively.

The front wall 11 is connected to the right and left end walls 13 and 14 along fold lines 15 and 16, respectively and forms corners therewith. Similarly, the back wall 12 is connected to the right and left end walls 13 and 14, respectively, along fold lines 17 and 18, forming corners therewith as shown.

The container 10 is thus formed in a rectangular configuration, with the front and back walls 11 and 12 forming a pair of opposing walls, and with the right and left walls 13 and 14 also forming a pair of opposing walls.

A bottom wall 20 substantially closes over the rectangular space defined by the walls 11-14, at the lower ends of walls 11-14.

A pair of spacer panels 21 and 22 are shown, also being upstanding, and extending in each case from the front wall 11, to the back wall 12 along fold lines 23-26, as shown. The spacer panels 21 and 22 are disposed generally parallel to their respectively associated upstanding right and left end walls 13, 14, spaced inboard thereof, in each case, as shown, to leave spaces 27, 28, between the spacer panels 21, 22 and their respectively associated end walls 13, 14.

Thus, with each end wall 13 and 14 being of corrugated cardboard construction, as shown, and of a thickness T1, and with each spacer panel likewise being of corrugated cardboard construction and of a thickness T2, the dimension “D” between the outer surface of each end wall and the inner surface of its associated spacer panel, is greater than the combined thicknesses of a given end wall and its associated spacer panel. Thus, “D” is greater than T1 plus T2, as shown.

The bottom wall 20 is comprised of a plurality of bottom wall panels, which will be discussed hereinafter.

In the embodiment shown in Fig. 1, all of the walls are constructed of corrugated cardboard, although, such is exemplary only, in that the various walls, the panels that comprise them, any tabs on various panels or the like, may all be constructed of other materials that will meet that criteria set forth in the claims.

The back wall 12 is comprised of two different back wall portions 30 and 31, secured together as a single wall 12, via an adhesive coated tab 32 extending from back wall portion 30, and being adhesively secured behind back wall portion 31, as shown.

An optional container divider 33 is shown, in phantom because it is optional, extending between and foldably connected to the front wall 11 and the back wall 12, as shown.

With reference now to Fig. 2, it will be seen that a plurality of stackable display containers are shown, stacked one upon the other, and that the stacking support provided at the right and left ends of the containers 10, by means of the spacer panels 21, 22, being disposed inboard of, and parallel to their respectively associated upstanding end walls 13, 14, provide a stacking support width “D”, at each of the right and left ends of the containers 10, for enabling one to stack multiple containers, one upon the other, with stability and improved stacking strength.

In the containers as shown in Figs. 1 and 2, it will be seen that there are provided access openings 34, 35, defined by U-shaped cut-outs in the front wall 11 of the container 10, for ready access to packages that are to be displayed in the container 10. It will also be seen that the access openings 34, 35 communicate with the open upper end of the container 10, which is free of any top wall or panel covering the same, also for ready access to containers in a stack such as shown in Fig. 2; especially to the uppermost container 10 in that stack.

With reference now to Fig. 3, it will be seen that the front wall 11 of the container 10 is comprised of outer and inner panels 40 and 41, connected together along a fold line 42. Similarly, rear panel portion 30 of rear wall 12 is comprised of outer and inner wall panels 43 and 44, respectively, connected together along a fold line 45.

Rear wall portion 31 is comprised of outer and inner panels 46 and 47, respectively, connected together along fold line 48, as shown.

Right spacer panel 21 is foldably connected along fold line 50, as shown in Fig. 5, to inner back wall panel 44 for its connection to back wall 12, and is foldably connected by means of a glue tab 51, to the inner surface of outer front wall panel 40, by means of glue or other adhesive, as shown at the lower right corner of Fig. 3.

Spacer panel 22 is foldably connected to the front wall panel 11, by fold line 52, to inner front wall panel 41, at the lower left end of the container as shown in Fig. 3. Spacer panel 22 is foldably connected to the inner surface of outer back wall panel 46, via a glue tab 53, adhesively securing the same to the inner surface of back wall panel 46, as is shown more clearly in the detail of Fig. 4.

The divider 33 may be comprised of right and left divider panels 54 and 55, foldably connected at their upper ends 56, with panel 54 being foldably connected to outer panel 46 of the back wall 12, and foldably connected to the front wall as shown at 58, by means of a glue tab 60 adhering the same to the inner surface of inner front wall panel 41, as shown in Fig. 3.

With reference now to Figs. 6 and 7, the container 10 is shown in its preassembled condition, in which the container 10 is in its knocked-down or flattened condition as shown, with its front and back walls 11 and 12 connected to right and left end walls 13 and 14 by fold lines 15, 16, 17 and 18, as shown, which, in the fully assembled condition of the container 10 as shown in Figs. 1 and 2, such fold lines 15-18 become the corners for the container.

The bottom wall 20 for the container 10, is comprised of a plurality of bottom wall panels 62, 63, 64, 65 and 66, foldably connected to the panels that comprise the walls 11, 12, 13 and 14, via fold lines 67, 68, 70, 71 and 72, as shown in Figs. 6 and 7.

In the illustration of Fig. 6, removable access panels 73, 74 are shown, carried by the front wall 11, and readily removable therefrom by separating the same from the front wall 11 along pre-cut score lines 75, 76, as shown, to yield the U-shaped cut-outs 34, 35 as shown in Fig. 1.

It will be seen that the bottom wall 20 may be comprised of the five panels described above, or any other number of panels such as will substantially or completely close over the bottom of the container 10.

With reference now to Fig. 8, it will be seen that a blank 80 is shown, preferably of corrugated cardboard construction, provided as a planar sheet, as shown, with the various panels described above with respect to the preassembled and fully assembled container 10, with solid lines defining edges or cut lines, and with dotted lines defining fold lines.

A plurality of glue or other adhesive zones are shown, in which adhesive may be used to secure panels together as described above. Such adhesive zones or lines are identified by the numbers 81, 82, 83, 84, 85, 86, 87, 88, 90, 91, 92, 93 and 94.

In Fig. 8, the various panels are numbered, using the same numbering for panels of the preassembled container and the fully assembled container 10, as described with

respect to the illustrations of Figs. 1-7, so that it can be readily understood how the panels of Fig. 8 relate to the various wall-forming panels, bottom-forming panels, spacer panels and glue tabs as shown in the illustrations of Figs. 1-7.

Also, with respect to Fig. 8, it will be understood that the illustration is of that side of the blank that becomes substantially hidden from view when the blank is assembled into a container 10 as shown in Fig. 1, in order to illustrate locations for placement of adhesive.

It will be understood that various modifications may be made in the details of construction, as well as in the use and operation of the container of this invention, its preassembly and blank, all within the spirit and scope of the invention as defined in the appended claims.